REMARKS

This Amendment is in response to the Office Action dated February 9, 2006. Claims 1-14 are pending in the present application. Claims 1, 2, 7 and 12 have been amended. Support for these amendments are found generally throughout the specification and specifically at page 5, lines 16 through page 6, line 2.

Present Invention

A dual port USB interface is disclosed. The dual port interface comprises a USB host port and a USB peripheral port. The host port and the peripheral port are defined using predetermined signals. In a preferred embodiment the dual port USB interface is utilized in a network where at least one dual port USB (DPUSB) connector is connected to either standard USB connectors or other DPUSB connectors. By use of the DPUSB interface, a single device in a network can act as both a host or a peripheral to other devices as well create network peer-to-peer relationships. Use of DPUSB connectors also provides the opportunity of new types of devices such as memory cards and cables that will greatly increase the ease of use of many intelligent electronic devices such as cameras and PDA's.

Claim Rejections-35 USC 102

The Examiner states,

2. Claims 1, 3, 4, 5, 10, 12, and 13 are rejected under 35 U.S.C. 102(e) as being anticipted by Beard et al. (U.S. Patent no. 5,991,830 hereinafter "Beard").

3. Referring to apparatus claims 1 and 12, Beard teaches a device comprising: a processor (see lines 62-65 of column); and a single I/O interface coupled to the processor (see lines 41-48 of column 4), comprising a host port; and a peripheral port (see lines 41-48 of column 4) wherein the host port and the peripheral port are defined using predetermined signals and wherein the peripheral port and the host port are both active at the same time (see paragraph bridging columns 5 and 6).

4. Referring to claim 3, Beard teaches the two connected devices utilizing the single

I/O interface can have a peer-to-peer connection via the host port and the peripheral port (see lines 19-29 of column 4).

5. Referring to claim 4, Beard teaches two connected devices using a single I/O interface can have a one-to-many relationship via either the host port and/or the peripheral port (see figure 3 and lines 13-34 of column 5).

6. Referring to claims 5 and 13, Beard teaches the device needs only one physical I/O port via the connector that includes a host port and a peripheral port which are defined using the predetermined signals (see lines 45-57 of column 5).

7. Referring to claim 10, Beard teaches the first and second device can any of a camera, a computer, a personal digital assistant, laptop device, handheld device, printer, and cellular phone (see figure 1 and lines 19-29 of column 4).

Claim Rejections- 35 USC 103

The Examiner states,

9. Claims 2, 6, 7, 8, 9, 10, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beard in view of Hanson et al. (U.S. Patent No. 6,460,094 hereinafter "Hansen").

10. Referring to claim 7, Beard teaches a network comprising:

a first device; the first device including a signal I/O interface (see item 101 in figure 1), the interface including a host port and a peripheral port, wherein the host port and the peripheral port are defined using predetermined signals (see paragraph bridging columns 5 and 6); and

a second device for communicating with the first device (see item 02 in figure 1), the second device using the predetermined signals, wherein the peripheral port ad the host port are both active at the same time (see paragraph bridging columns 5 and 6).

11. Referring to claims 2, 8, and 9, Hanson teaches the host a peripheral ports are USB ports and the predetermined signals are within the USB standard (see lines 47 of column 4 to line 2 of column 5).

It would be obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Beard with the above teachings of Hanson for the same reasons as mentioned above.

12. Referring to claims 6, 11, and 14, Beard fails to teach the predetermined signals comprise host differential data lines and peripheral differential data lines.

Hansen teaches, in an analogous system, the above limitations (see lines 52-65 of column 4).

It would have been obvious tone of ordinary skill in the art at the time of the applicant's invention to modify the apparatus and system of Beard with the above teachings of Hansen. One of ordinary skill in the art would have been motivated to make such modification quickly determine whether connected device is a high speed device as suggested by Hanson (see lines 3-16 of column 2).

The Beard patent is based upon an apparatus that connects multiple peripherals to a single computer which has one connection to the apparatus and one or more connections to peripherals. (see claims 1, 4, 6, 8, 9, 11, 15, 16, 17, 19, 20 of the Beard patent). It is clear from the text and

the claims of Beard that the Beard patent concerns how a switching mechanism can connect multiple ports from peripheral devices to a single port of a host device.

However, in the present application, amended claims 1, 7, and 12 refer to a single apparatus, which has two connections to one device (the host) that are active simultaneously to two different devices (the peripherals) so as to achieve beneficial network connectivity.

The first claim of our patent application is extended in claim 2 to USB devices in the following way. USB networks are star networks characterized by three elements; namely one host computer with host ports, multiple peripheral devices with device ports, and switches called hubs which act as host port expanders that allow a single host port to connect to many peripheral devices. Claim 2 extends the single star USB network model by allowing the USB host device to also be a USB peripheral device in a second star network through the mechanism of incorporating both the USB host port and the USB device port of the same computer in the same physical connector (the DPUSB port). We now see that the standard star network of USB which normally only allows one server and many clients to be extended to a per-to-per network which allows each member of the network to be both a server and a client.

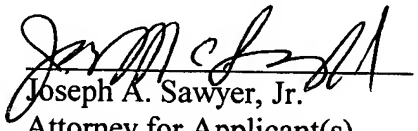
Applicant respectfully submits therefore that claims 1, 7 and 12 are neither taught nor suggested by the cited reference. In addition, Claims 2-16, 8-11, 13 and 14 are also allowable since they depend from an allowable base claim.

In view of the foregoing, it is submitted that the claims 1-14 are allowable over the cited references and are in condition for allowance. Applicant respectfully requests reconsideration of the claims, as now presented.

Applicants' attorney believes this application in condition for allowance. Should any unresolved issues remain, Examiner is invited to call Applicants' attorney at the telephone number indicated below.

Respectfully submitted,
SAWYER LAW GROUP LLP

April 10, 2006



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